Free GIS Desktop Applications

Application	Description	Information and Resources
ArcGIS Explorer Desktop	 ArcGIS Explorer is ESRI's free, downloadable GIS viewer that gives you an easy way to explore, visualize, and share GIS information. Built for users to easily explore, visualize, share, and present your geographic information.	**Features** • **Easy and intuitive to use—**it's easy for anyone to begin working with ArcGIS Explorer, with its intuitive and easy to use ribbon user interface that presents tools in the context of how you use them. Tools including integrated tool tips and Help. • **Choose your Basemap—**The Basemap Gallery allows you to choose from a variety of ready-to-use basemaps so you can get started quickly. Select from ArcGIS Online basemaps such as World Imagery, World Streets, World Topographic Maps, or choose a Bing Map service (Aerials, Hybrid, and Roads). You can also create your own basemaps and add them to the Gallery. Toggle basemaps on the fly while maintaining your operational layers. • **Add local data** such as geodatabases, shapefiles, KML/KMZ, GPX, and raster formats (JPEG 2000, GeoTIFF, MrSID). You can also add layer files and packages created using ArcGIS for Desktop, or add locations from your spreadsheets. • **Access a wide variety of mapping services** from ArcGIS for Server; ArcIMS; and Open Geospatial Consortium, Inc. (OGC) WMS, and GeoRSS feeds. • **Integrate a wide variety of content** such as photos, videos, documents, and more and place them in a geographic context. • **Integrated 2D and 3D Display—**Switch display modes with a single click. View maps and globes in any projection or coordinate system. • **Extend ArcGIS Explorer** using Add-Ins and the Analysis Gallery. Extend the core capabilities using geoprocessing tools and models published using ArcGIS for Server, or connect to a wide variety of other available services. • **E-mail your maps and layers** directly from the application. See a demo [WMV]. • **Communicate geographically using Presentations—**A unique and powerful feature of ArcGIS Explorer, presentations allow you to communicate geographically using live data and services. Answer geographic questions and share the answers with others. • **Customize ArcGIS Explorer** using centrally managed application configurations with no programming required. Control functionality and add your own tools, and customize the look and feel of ArcGIS Explorer to meet the needs of specific users or workflows in your organization. You can also use the free, downloadable software development kit (SDK) to create new add-ins. • **Fully localized—**ArcGIS Explorer is fully localized, including all user interface elements and Help. Choose from English, French, Japanese, Chinese, German, or Spanish. • **Find more resources—**Visit the online Resource Center for a one-stop place to access online help, blogs, and samples.
Google Earth	 Google Earth is Google's free, downloadable GIS viewer that gives you an easy way to explore, visualize, and share GIS information. Built for users to easily explore, visualize, share, and present your geographic information.	**Features** See the Google Earth - Feature Tour
Google Sketch-up	 SketchUp Create 3D models, share them with the world and add them to Google Earth. **Get models online for free -** You can build models from scratch, or you can download what you need. People all over the world share what they've made on the Trimble 3D Warehouse. **Get started -**Dozens of video tutorials, an extensive Help Center and a worldwide user community mean that anyone who wants to make 3D models with SketchUp, can. Check out our free training videos	**See dozens of great SketchUp features** **Placing a SketchUp model in Google Earth -** Geo-Modeling is the process of creating a model with the purpose of including it in Google Earth's 3D Building layer (making it visible for all Google Earth users). However, you might want to place and preview a model in its proper geo-located place in Google Earth without submitting the model for inclusion in Google Earth's 3D Buildings layer. To place (and preview) a model in your local copy of Google Earth: 1. Create your model. 2. Add location information to the model. Refer to Add Location: Adding a location for further information. 3. If necessary, resize your model to fit the building footprint of the location. 4. If necessary, reposition your model over the location. 5. Place the model in Google Earth. Refer to Preview Model: Previewing a model in Google Earth for further information.
EPA BASIN	 EPA's BASINS (Better Assessment Science Integrating point & Non-point Sources) BASINS is a multi-purpose environmental analysis system that integrates a geographical information system (GIS), national watershed data, and state-of-the-art environmental assessment and modeling tools into one convenient package. Update of BASINS Software Now Available BASINS (Better Assessment Science Integrating point and Nonpoint Sources) is a multipurpose environmental analysis system designed for use by regional, state, and local agencies in performing watershed and water quality-based studies. Update 3 of the BASINS 4.0 software is now available for download. Like previous releases, Update 3 includes within	**Features** • Data Download Tool • GIS Project Builder • GIS Edit Tools • Automatic and Manual Watershed Delineation • Watershed Characterization Reports • Series of Surface Water Models • Customized databases Fact sheet about version 4.0 (April 17, 2007) Press Release (April 23, 2007) Basic Information about how the tool and its usefulness for multi-purpose environmental analysis. Download the latest version of the model, GIS application, updated system files, data, and tutorial. Order CDs from our publication center. Documentation including user manuals, case studies, and technical notes. Frequent Questions about applicability, data, models, and technical issues. Training—live classes and downloadable lectures and exercises. Email listserv acts as a forum for discussion and technical support. Join the Listserv or search the archives. Other Tools, Utilities, & Features to be used with basins. Metadata describing the content, quality, condition, and other characteristics of

	the open-source MapWindow GIS interface, a Data Download Tool, project builder, watershed delineation routines, and data analysis and model output visualization tools. New features in Update 3 include plug-in interfaces for well-known watershed and water quality models SWMM5, WASP7, and SWAT 2005.	environmental data. Related Links within and outside EPA.
GRASS	**GRASS (Geographic Resources Analysis Support System)** GRASS (Geographic Resources Analysis Support System) is a Software for performing spatial analysis. It consists of more than 350 modules for processing GIS Data. Many interfaces to other programs in related domains like geostatistics, databases, mapserver, and even other GIS software exist. It can serve as a Desktop GIS and as the backbone of a complete GIS infrastructure. GRASS was originally developed in the beginning of the 1980s by the US Army Construction Engineering Research Laboratories (USA-CERL) and was published as a public domain software. When the USA-CERL withdrew from the GRASS development, an international developer team took over this work. Since 1999 GRASS has been published as a free software under the terms of the GNU General Public Licence. GRASS is successfully used in scientific applications, commercial settings and by public officials all over the world.	**Features** • 2D/3D Vector engine with Database Management support • Image processing modules • Visualization and modeling of 2D, 3D maps and volumes • Works on Linux, Mac OS, MS-Windows platforms OSgeo - GRASS Page: http://www.osgeo.org/grass Home Page: http://grass.osgeo.org/ Download: http://grass.osgeo.org/download/ Mailing Lists: http://grass.osgeo.org/community/support.php GRASS-trac: http://trac.osgeo.org/grass
Quantum GIS	**Quantum GIS (QGIS)** is a user friendly Open Source Geographic Information System (GIS) that runs on GNU/Linux, Unix, Mac OSX, MS Windows and Android. QGIS supports vector, raster, and database formats and is licensed under the GNU General Public License. QGIS lets you browse, edit and create a variety of vector and raster formats, including ESRI shapefiles, spatial data in PostgreSQL/PostGIS, GRASS vectors and rasters, or GeoTiff. You can create customised plugins and GIS enabled applications using Python or C++. Maps can be compiled for printing using the print composer. QGIS supports plugins to do things like import of delimited text data, download tracks, routes, and waypoints from your GPS or visualize OGC WMS and WFS layers.	**Features** • Raster and vector support • Integration with GRASS GIS • Extensible plugin architecture • Digitizing tools • Print composer • OGC support (WMS, WFS) • Overview panel • Spatial bookmarks • Identify/Select features • Edit/View attributes • Feature labeling • On the fly projection **Available Plugins** • Delimited text import • Copyright lable • Graticule builder • North arrow • Scale bar • Copyright label • PostGIS import tool • Plugin installer • Mapserver export • Raster georeferencing • GPS tools • GRASS • WFS **Links** • OSGeo Quantum GIS Page: http://www.osgeo.org/qgis • Home Page: http://www.qgis.org • Mailing List: http://qgis.osgeo.org/community/mailinglists.html • Forum: http://gis.stackexchange.com/questions/tagged/qgis • Blog: http://blog.qgis.org • Planet: http://qgis.org/planet • Screenshots: more screenshots at qgis.org
Other Free GIS tools are available at OSGeo	Open-Source Geo is a site developed by the Open Geospatial Consortium (OCS) http://www.opengeospatial.org/ which establishes international standards for GIS data.	OSGeo Homepage http://www.osgeo.org/ About the Open Source Geospatial Foundation http://www.osgeo.org/content/foundation/about.html